

Work Order ID 109407

109407

Page 1

November-21-13 2:14:52 PM

Item ID: 646.9910

Accept

N900040100

Setup Start

NS1

Revision ID:

Stop

NS2

Item Name: Struts

Start Date: 11/21/13 Start Qty: 12.00

12

Cust Item ID:

Required Date: 11/21/13 Req'd Qty: 12.00

12

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run

Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2

| Sequence ID/ Work Center ID | Operation Description | Set Up/ Run Hours | Tool ID | Tool # | Plan Code | Accept Qty | Reject Qty | Reject Number | Insp. Stamp |
|--------------------------------|--------------------------|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|
|--------------------------------|--------------------------|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|

| Draw Nbr | Revision Nbr |
|----------|--------------|
| 646.9900 | N/C |

110 0.00

110

Doosan

Memo

0.00

Doosan Lathe

*** CUT BLANK ON CHOP SAW AT 24.125" LONG***

TURN AS PER DWG

DWG REV: N/C

FOLIO REV: AA

DEBURR

120 QC2- Inspect parts off machine FAI/FAIB 0.00

120

QC

Memo

0.00

Quality Control

DAS 40 9-89 13/12/02
13-12/3

SA 13-12-3

12 0

12 0

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

| | | | | | | | | | | | | | | | | | | |
|--|--|--|--------------------------------------|------------------------------------|------------------------------------|--------------------------------------|------------------------------------|------------------------------------|--|----------------------------------|--|------------------------------------|--|--------------------------------|------------------------------------|------------------------------------|-----------------------------------|--|
| Work Order: _____ Part No. _____ NCR No. _____ | DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Suspected Unapproved <input type="checkbox"/> | AGAINST DEPARTMENT/PROCESS <table style="width:100%;"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Crosstube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table> | Skid-tube <input type="checkbox"/> | Crosstube <input type="checkbox"/> | Water Jet <input type="checkbox"/> | Engineering <input type="checkbox"/> | Machining <input type="checkbox"/> | Small Fab <input type="checkbox"/> | Prod. Eng. Coord. <input type="checkbox"/> | Quality <input type="checkbox"/> | Thermoforming <input type="checkbox"/> | Finishing <input type="checkbox"/> | Rec/Store/Packaging <input type="checkbox"/> | Other <input type="checkbox"/> | Large Fab <input type="checkbox"/> | Composite <input type="checkbox"/> | Supplier <input type="checkbox"/> | |
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| Large Fab <input type="checkbox"/> | Composite <input type="checkbox"/> | Supplier <input type="checkbox"/> | | | | | | | | | | | | | | | | |

| Root Cause | Date | Step | Qty | Description of work order update or non-conformance | Initial Chief Eng | Action Description | Sign & Date | Verification | QC Inspector |
|---------------|------|------|-----|---|-------------------|--------------------|-------------|--------------|--------------|
| Design | | | | | | | | | |
| Doc/Data | | | | | | | | | |
| Equip/Tooling | | | | | | | | | |
| Handling/Pre | | | | | | | | | |
| Material | | | | | | | | | |
| Operator | | | | | | | | | |
| Offset/Setup | | | | | | | | | |
| Process | | | | | | | | | |
| Supplier | | | | | | | | | |
| Training | | | | | | | | | |
| Transport | | | | | | | | | |
| Unapproved | | | | | | | | | |

FAULT CATEGORY

| | | | |
|--|--|---|--|
| Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric <input type="checkbox"/> Cracks <input type="checkbox"/> Crimp/Kink/Ripple/Wave <input type="checkbox"/> Cuffs <input type="checkbox"/> Crushing <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Marks/Chatter <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube | General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damage/Defect <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drawing <input type="checkbox"/> Drill Holes <input type="checkbox"/> Finish <input type="checkbox"/> Fit/Function | <input type="checkbox"/> Folio/Program <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete/Unqualified <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Misaligned/off center <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Off-set <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence | <input type="checkbox"/> Outside Dimensions <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge <input type="checkbox"/> Pressure/Forced Set-up <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other |
|--|--|---|--|

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

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| Design | | | | | | | | | |
| Doc/Data | | | | | | | | | |
| Equip/Tooling | | | | | | | | | |
| Handling/Pre | | | | | | | | | |
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| Process | | | | | | | | | |
| Supplier | | | | | | | | | |
| Training | | | | | | | | | |
| Transport | | | | | | | | | |
| Unapproved | | | | | | | | | |

FAULT CATEGORY

| | | | |
|--|--|---|--|
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|--|--|---|--|

Work Order ID 109407

109407

Page 3

November-21-13 2:14:52 PM

Item ID: 646.9910 Accept *N900040100* Setup Start *NS1*
 Revision ID: Stop *NS2*
 Item Name: Struts
 Start Date: 11/21/13 Start Qty: 12.00 *12* Cust Item ID:
 Required Date: 11/21/13 Req'd Qty: 12.00 *12* Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start *NR1*
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop *NR2*

| Sequence ID/ Work Center ID | Operation Description | Set Up/ Run Hours | Tool ID | Tool # | Plan Code | Accept Qty | Reject Qty | Reject Number | Insp. Stamp |
|--------------------------------|---|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|
| 200 | QC5- Inspect part completeness to step on W/O | 0.00 | | | | 12 | | | MA 11-14-01-13 |
| *200* | | | | | | | | | |
| QC | Memo | 0.00 | | | | | | | |
| Quality Control | | | | | | | | | |
| 210 | Identify as per dwg & Stock Location: <u>51420</u> | 0.00 | | | | 12x | | | |
| *210* | | | | | | | | | |
| Packaging | Memo | 0.00 | | | | | | | |
| Packaging | ***IDENTIFY AS PER APICAL MPP-120 BY STAMPING P# AND REV*** | | | | | | | | |
| 220 | QC21- Final Inspection - Work Order Release | 0.00 | | | | | | | |
| *220* | | | | | | | | | |
| QC | Memo | 0.00 | | | | | | | |
| Quality Control | | | | | | | | | |

14-01-14

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

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FAULT CATEGORY

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|--|--|---|--|

Picklist Print

November-21-13 2:14:52 PM

Work Order ID: 109407
Parent Item: 646.9910
Parent Item Name: Struts
Comments: IPP REV:A NEW ISSUE 12-09-19 JLM VERIFIED BY:DD

Start Date: 11/21/13
Start Qty: 12.00
Required Date: 11/21/13
Required Qty: 12.00

| Component Item ID/ Item Name | Replacement Item ID | Mfg/ Purch | Bin Item | Primary Location | Last Location | Route Seq ID | Unit of Measure | Qty on Hand | Qty per Kit | Total Qty | Qty Issued | Date Issued | Status |
|--|------------------------|---------------|-------------|---------------------|------------------|-----------------|--------------------|----------------|-------------|--------------|---------------|----------------|--------|
| M6061T6R0.563 6061T6 ROUND BAR .563 | | Purchased | No | | | | f | 252.1500 | | 26.526316 | | | |

DAS 1
 40
 9-09
 13/12/02

| <u>Location</u> | <u>Loc Qty</u> | <u>Loc Code</u> |
|-----------------|----------------|-----------------|
| MAT012 | 252.15 | |
| 123218 | 5 | |
| 123294 | 25.6 | |
| 123483 | 5.85 | |
| → m126852 | 215.7 | |

27.0

M6061T6R0.563
 M126852

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

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| Training | | | | | | | | | |
| Transport | | | | | | | | | |
| Unapproved | | | | | | | | | |

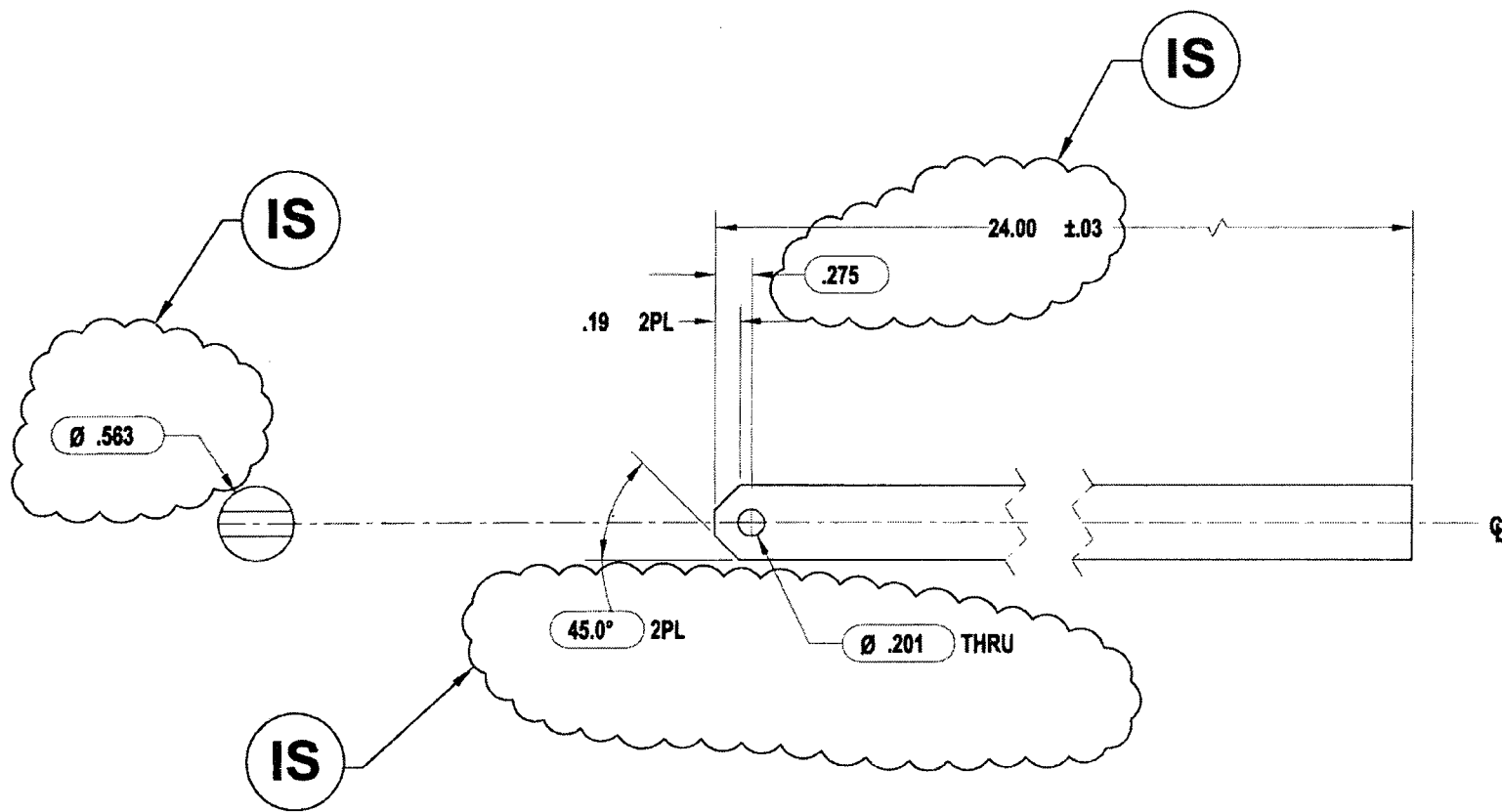
FAULT CATEGORY

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|--|--|---|--|

FIRST ARTICLE INSPECTION CHECKLIST

10.04.15

| | | | | | | |
|--|--|------------------------|-----------------------|-----------------|---|--|
| APICAL INDUSTRIES, INC. | ENGINEERING CHANGE NOTICE NO. 03728 | | | | SHEET 1 OF 1 | |
| | DWG NO. 646.9900 | REV: N/C | PREPARED BY B. PETERS | DATE: 12/05/12 | EFFECT ON DWG <input type="checkbox"/> INC. <input checked="" type="checkbox"/> UNINC. | |
| | DWG TITLE: STRUT | | | | | |
| | APPROVED BY: ENGR <i>[Signature]</i> | MFG <i>[Signature]</i> | QC <i>[Signature]</i> | EFF: NEXT ORDER | | |
| TRANSACTION CODES (TC): A-ADD C-CREATE R-REVISE D-DELETE | REASON: REVISED LENGTH TOLERANCE AND CRITICAL DIMENSIONS. | | | | ECR: D-12-014 | |



SHEET 1 IS:

| | | | |
|---------------------|--|---|--|
| DOCUMENTS EFFECTED: | <input type="checkbox"/> RFMS <input type="checkbox"/> MDL <input type="checkbox"/> INSTALL INSTRUCC <input type="checkbox"/> ICA <input type="checkbox"/> BOM | CHANGE CATEGORY <input type="checkbox"/> MAJOR <input checked="" type="checkbox"/> MINOR | DER REVIEW REQUIRED <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO |
|---------------------|--|---|--|

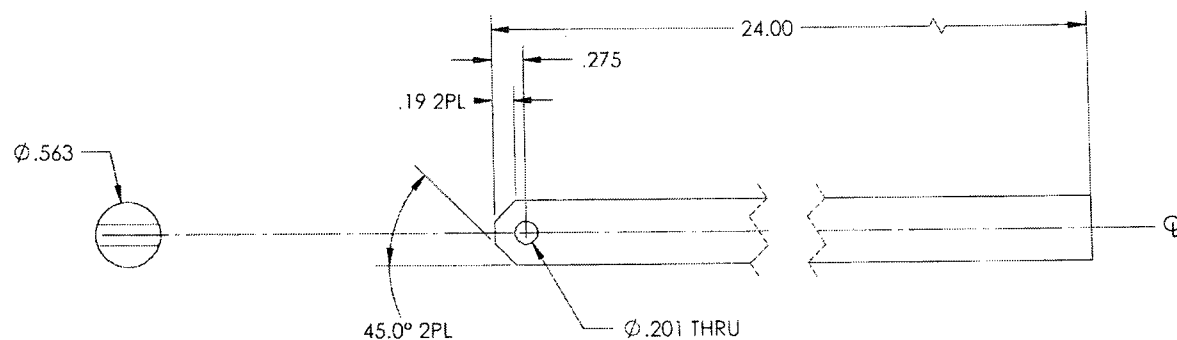
| RECORD | | | |
|--------|-------------------------|---------|----------|
| REV | DESCRIPTION | DATE | APPROVED |
| | 1ST PROTOTYPE DESIGNING | | NC |
| 1-10 | 2ND PROTOTYPE | 10/1/80 | P. LAM |

1. MATERIAL: 6061-T6 ALUMINUM BAR 1AW AMS-QQ-A-250/11

2. FINISH: HARD ANODIZE 1AW MIL-A-8625 TYPE III, CLASS 2, COLOR BLACK
CARDINAL 4860-50 PRETREATMENT PRIMER
PRIME 1AW MIL-P-23377J TYPE I CLASS N

3. DEBURR AND BREAK ALL SHARP EDGES

4. IDENTIFY 1AW MPP-120

[illegible]



A.T.G. Industries Inc.
731, rue Industrielle Rd.
PLATING DEPARTMENT
Rockland, On K4K 1T2
Canada
Ph: (613) 446-4544
Fax: (613) 446-4556

Pack List

Number: 62813

Date: 09-Jan-14

To

DART AEROSPACE LTD
1270 ABERDEEN ST.
HAWKESBURY, ON K6A 1K7
Canada

Ship To


DART AEROSPACE LTD
1270 ABERDEEN ST.
HAWKESBURY, ON K6A 1K7
Canada

Ph: 613-632-5200

Fax: 613-632-1185

Ph: 613-632-5200

Fax: 613-632-1185

| Terms | | Ship Via | |
|---|---|--------------------|--|
| Quantity | Description | Rev: | |
| 1 lot | Part: ASST <u>19 PCS 646.9910 (11.90\$)</u> 9 PCS 647.9315 (14.35\$) 10 PCS 649.5010 (34.00\$) 13 PCS 649.5011 (11.75\$) 32 PCS 649.5012 (7.30\$) 34 PCS 649.5013 (11.60\$) 16 PCS 649.5212 (9.00\$) 16 PCS 649.5214 (9.00\$) HARD ANODIZE BLACK MIL-A-8625 TYPE III CLASS 2 13 PCS D3229-7 (1.10\$) 16 PCS D3299-5 (1.15\$) BLUE ANODIZE MIL-A-8625 TYPE II CLASS 2 PRICE IS PER PIECE Job: 20140010 | PO: 22353 Line: | |
| Certificate of Conformance | | | |
| A.T.G. Industries certifies that all items in this shipment are in conformance with all requirements, specifications and drawings referenced in the purchase order. | | | |
| ISO 9001 : 2008 REGISTERED ATG SALES-2010 TERMS APPLY | | | |
| DATE : <u>9/1/14</u> | | | |
| CERTIFIED SIGNATURE : <u></u> | | | |
| RECEIVER SIGNATURE : _____ | | | |